UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF TEXAS
WACO DIVISION

CAMERON INTERNATIONAL CORPORATION, Plaintiff, v. BUTCH'S RATHOLE & ANCHOR SERVICE, INC., Defendant.	§ § § § § § § § § § § §	CIVIL ACTION NO. 6:20-cv-00124 **JURY TRIAL REQUESTED**

PLAINTIFF CAMERON INTERNATIONAL CORP.'S
OPENING CLAIM CONSTRUCTION BRIEF

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D	GLOSSARY OF OILFIELD PRODUCTION TERMINOLOGY (1st ed. 1988)
E	U.S. Patent Publication No. 2010/0300672 ("Childress")
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I. INTRODUCTION

Butch's proposed ten terms for construction. It contends that nine are indefinite, including simple-to-understand terms like "a single fluid conduit." Butch's also argues that typical patent claim terms, like "attached to" and "positioned at," are indefinite. But all of these terms have plain and ordinary meanings, and their meanings are otherwise clear from the intrinsic record. None of the identified terms are indefinite, and a person of ordinary skill in the art (a "POSITA")—who would have significant relevant industry experience and education—would understand them with reasonable certainty.

For the remaining term, Butch's proposes that "pipe joints" means "structures for joining pipes." This contradicts the common industry usage, and the plain language of the claims, which describe the "pipe joints" as being "coupled to" connection blocks, and which describe the connection blocks themselves as joining pipes. The claims, the specification, and the entire oilfield industry use "pipe joints" to mean lengths of pipe. The Court should adopt the ordinary and customary understanding in the industry as applied the same way in the patent claims.

As to "positioned at," Cameron proposes that the Court should construe this term to mean "attached to or adjacent to." This will clarify for the jury that the connection block that is "positioned at" the fracturing tree to provide fracturing fluid to the well can be either "attached to" the fracturing tree (*e.g.*, included as part of the stack of valves and conduits composing the fracturing tree), or "adjacent to" the fracturing tree.

As explained in detail below, the Court should find all of the proposed terms not indefinite; apply the straightforward industry-based and patent supported proposed constructions for "pipe joints" and "positioned at"; and give all of the remaining terms their plain and ordinary meanings.

II. BACKGROUND AND ASSERTED PATENTS

Hydraulic fracturing is a method of stimulating the production of oil and gas from a reservoir that involves pumping fluids downhole at high pressures and flow rates to fracture the oil and gas containing formations. Ex. A, ¶¶ 27–32. Hydraulic fracturing requires a substantial deployment of equipment to the wellsite, including frac tanks, blenders, pump trucks, and proppant storage units. *Id.* A depiction of a typical prior-art fracturing operation is below. Ex. A, ¶¶ 30–32 (annotating Ex. B, Fig. 1C).

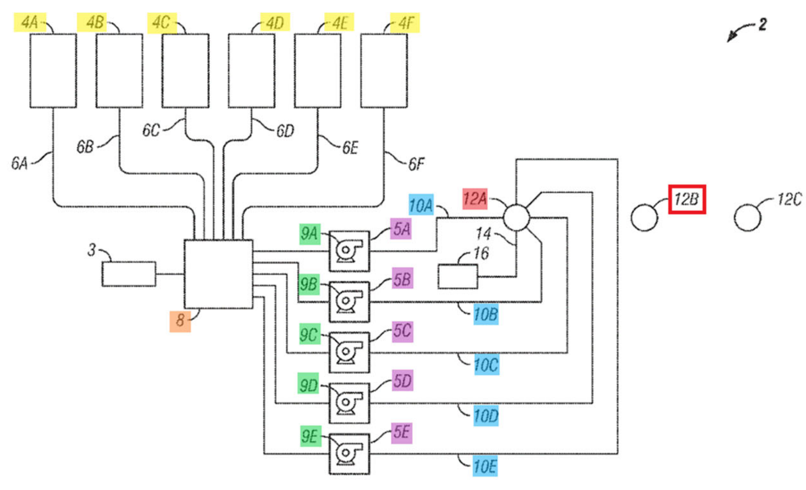


FIG. 1C
(Prior Art)

As this figure shows, fracturing a single well 12A (red) requires deploying and connecting many pieces of fracturing equipment, such as high-pressure pumps 9A–9E (green) mounted on pump trucks 5A–5E (purple) for providing fracturing fluid to well 12A. *Id.*

The depiction of the connections between these components, including fluid conduits 10A–10E (blue) between the outlets of the high-pressure pumps and the single well 12A, is "vastly simplified," as the complexity of the interconnections "is significant and expensive." *Id.* (quoting Ex. B, [0011]). Given this complexity, moving the equipment to fracture the next well (*e.g.*, 12B (outlined red)) introduces significant downtime between fracturing operations, increasing costs and delaying production. *Id.*

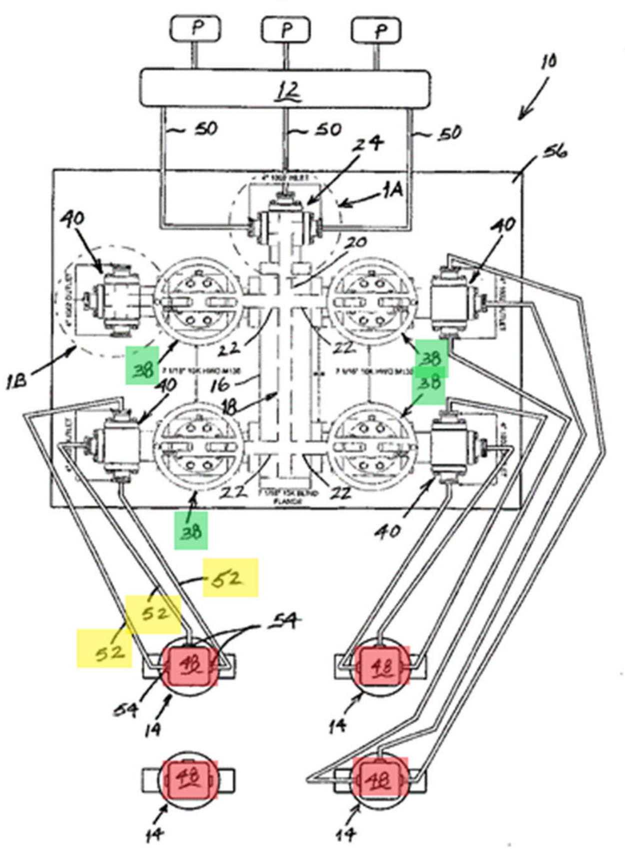
This dispute concerns three components of modern fracturing—fracturing manifolds, fracturing trees, and the fluid conduits that connection them—that together reduce the costs and delays of moving fracturing operations from one well to the next in prior-art fracturing systems.

A. Fracturing Manifolds

A fracturing manifold is a series of pipes, connections, and valves that direct fracturing fluid from the fracturing fluid supply toward the individual wells. *Id.* ¶ 33; Ex. C (defining "frac manifold" as "[a] system of frac valves that directs treatment fluid from the missile to multiple frac trees"); Ex. D (defining "manifold" as "[a]n accessory system of valves and piping to a main piping system (or other conductors) that serves to divide a flow into several parts, to combine several flows into one, or to reroute a flow to any one of several possible destinations").

The illustration below shows how fracturing manifolds can simplify fracturing multiple wells by allowing operators to make connections 52 (yellow highlighted number) (analogous to the simplified connections 10A-10E depicted above) to each well 48 (red highlighted number) in advance. Ex. A ¶¶ 34–36; Ex. E, [0019], [0021] (noting valves 38 (green highlighted number) control flow into the high pressure lines 52 so that "a single valve 38 is capable of controlling the entire pumping and isolation functions for one well 14").

Fig. 1

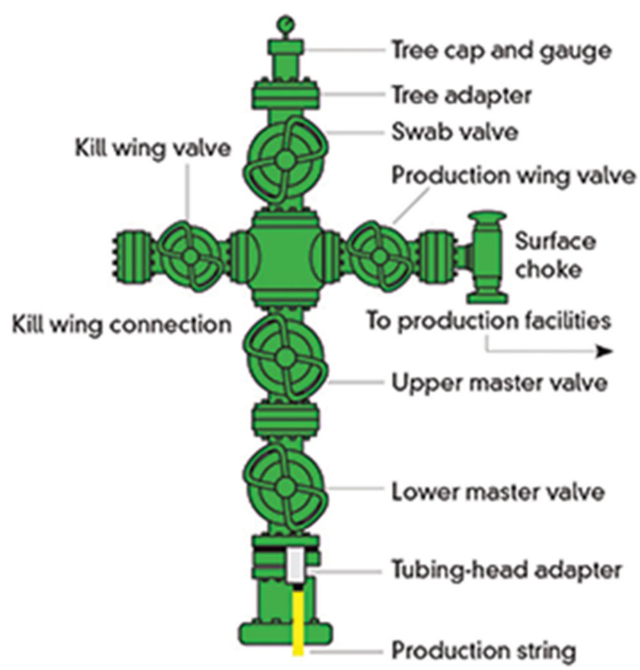


The operator can then redirect the fracturing fluid to a particular well by opening a corresponding valve 38. Ex. A ¶¶ 34–36; Ex. E, [0019], [0021]. But as explained below, connections 52 between a prior-art fracturing manifold's

outlet and its respective well are complex and expensive, and the high pressures inherent to hydraulic fracturing may require upgraded equipment at the wellhead. Ex. A, ¶¶ 45–50.

B. Fracturing Trees

One such piece of upgraded wellhead equipment is a fracturing tree. Fracturing trees are a specific type of Christmas tree installed specifically for the fracturing process. Ex. A, ¶¶ 49–50; Ex. J (defining "frac tree" as "[a] Christmas tree installed specifically for the fracturing process."). A Christmas tree is "[a]n assembly of valves, spools, pressure gauges, and chokes fitting to the wellhead of a completed well to control production." Ex. G; Ex. A, ¶¶ 42–44; Ex. F, CMRN000961 ("A 'Christmas tree' is an assembly consisting of valves and fittings and is used for controlling oil- and gas-well fluid and providing outlets and inlets for produced fluid and washing fluid, and so on."). An operator installs the Christmas tree on top of a wellhead assembly (a system of valves and adapters at the wellbore's surface termination). Ex. A, ¶¶ 42–43; Ex. F, CMRN000960.



The figure at right depicts a typical Christmas tree. Ex. A, ¶¶ 44–45; Ex. G (enlarged). Although there are various types of Christmas trees designed for specific uses (Ex. F, CMRN000961), the components of typical Christmas trees have production pressure ratings. Ex. A, ¶¶ 44–50; Ex. I (defining "Christmas Tree" as "used when reservoir pressure is sufficient to cause reservoir fluids to flow to the surface"); Ex. D (defining "Christmas Tree" as a device "to control well

production"). As this suggests, using typical Christmas trees for much higher pressure operations like fracturing may lead to costly and dangerous failures. Ex. A, ¶¶ 44–50.

One way operators can avoid these costly and dangerous failures is by using isolation equipment when a typical Christmas tree is in place during a fracturing operation. Ex. A, ¶ 47. Tree savers, for instance, are isolation equipment that can protect the Christmas tree and the wellhead from the high fracturing pressures and abrasive fracturing materials. Ex. H, CMRN000521; Ex. A, ¶ 47. The tree saver mounts on the existing Christmas tree, and a mandrel extends through the valves on the tree and into the tubing to prevent the fluid or pressure from directly reaching the tree. Ex. H, CMRN000521; Ex. A, ¶ 47. After fracturing is complete, the operator removes the tree saver, and the Christmas tree and wellhead valves can operate normally to control the flow of production fluid. Ex. H, CMRN000521; Ex. A, ¶ 47.

Alternatively, an operator can replace the Christmas tree with a fracturing tree. Ex. A, ¶¶ 48–50; Ex. J (defining "frac tree" as "[a] Christmas tree installed specifically for the fracturing process."). Although frac trees may look similar to typical Christmas trees, and share many components, "[f]rac trees generally have larger bores and higher pressure ratings than production trees to accommodate the high flow rates and pressures necessary for hydraulic fracturing." Ex. J; Ex. A, ¶¶ 48–50. To provide for these higher pressure ratings and flow rates, fracturing trees comprise heavier-duty materials and valves than typical Christmas trees. Ex, A, ¶ 49. These upgrades make fracturing trees more expensive, heavier, and bulkier. *Id.*

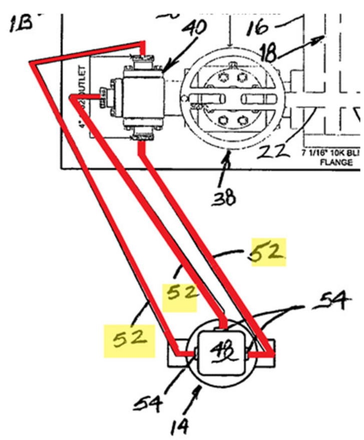
C. Fluid Conduits

Connecting the fracturing tree to the fracturing manifold can be complex. *Id.*, ¶¶ 37–41. As explained above, the fracturing tree is large and heavy, and is in a fixed position above the wellbore. *Id.* The fracturing manifold, likewise comprising heavy-duty pipes and valves that can withstand the pressures and abrasive materials inherent to fracturing, is also large and heavy. *Id.*

And it is in a fixed position to best accommodate bringing fluid to multiple wells from the various mixers and pumps. *Id.* Because of this, the outlets of fracturing manifolds and the inlets of fracturing trees generally do not align, vertically or horizontally. *Id.* Connecting fracturing manifolds to fracturing trees thus usually requires installing fluid conduits that can change direction between the respective outlets and inlets. *Id.*

1. Prior-art frac iron—multiple fluid pathways

The prior art solved this problem of making the vertical and horizontal changes necessary

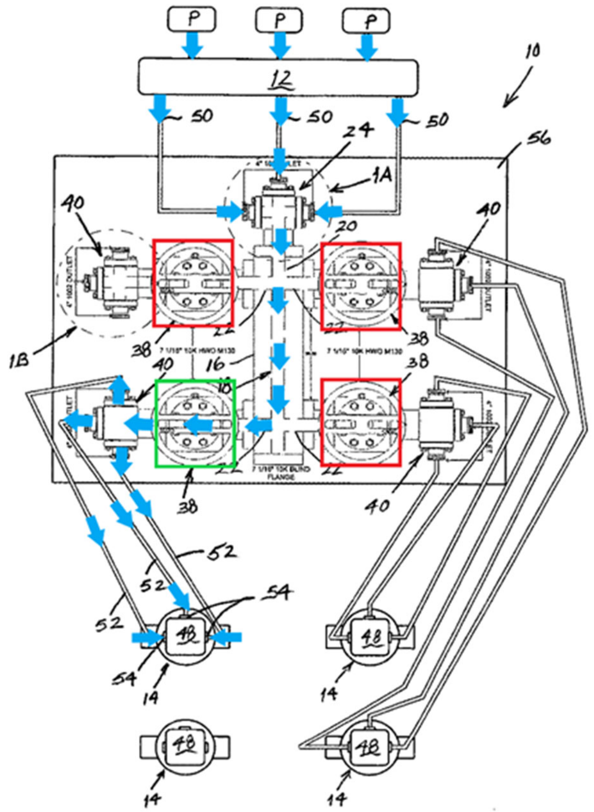


to connect the fracturing manifold to the fracturing tree (while also providing sufficient flow rate and pressure) by using multiple pieces of smaller-diameter fluid conduits called "frac iron," or "treating iron." *Id.*, ¶ 37; Ex. H, CMRN000521–000523. As the annotated figure at left shows, crosses or tees at the outlet of prior-art fracturing manifolds may provide outlets for connecting multiple pieces of frac iron (connections 52). Ex. E, Fig. 1 (annotated and excerpted), [0019]; Ex. A, ¶ 37.

To provide inlets for multiple pieces of frac iron, a fracturing tree includes a flow cross, commonly called a "frac head." Ex. A, ¶ 51; Ex. K (defining "frac head" as "[a] flow cross installed on top of a frac tree where treating iron is connected and treatment fluid enters the frac

tree") (noting "goat head" as an alternative form of the term); Ex. J ("A frac tree typically consists of upper and lower master valves, flow cross, wing valves, goat head, and swab valve."). As the green arrows in the above annotated images of typical frac heads show, frac heads include multiple inlets for connecting frac iron to the fracturing tree. Ex. A, ¶ 51.

The below figure shows how the frac iron lines running between the flow cross at the fracturing manifold and the frac head at the fracturing tree provide multiple fluid pathways between the fracturing manifold and the fracturing tree. Ex. E, Fig. 1 (annotated); Ex. A, ¶¶ 33–36. With the valves 38 (outlined red) closed, and the valve 38 (outlined green) open, the fracturing fluid will flow (blue arrows) through the outlet cross 40 at the fracturing manifold, through high pressure lines 52 (the frac iron), and into inlet connections 54 on the frac head at frac tree 48. Ex. E, [0019], [0021]; Ex. A, ¶¶ 33–36, 51. As this figure reflects, each high pressure line 52 thus represents a separate fluid pathway between the fracturing manifold and frac tree 48. Ex. A, ¶¶ 33–35.



To facilitate the horizontal and vertical adjustments necessary to align frac iron along the ground from the fracturing manifold and up to the frac head inlets (generally at or near the top of the fracturing tree), multiple segments of frac iron connect using hammer unions. Ex. A, ¶¶ 39–41. A typical make-up requires dozens of these hammer unions, which, as the name implies, workers must install using repeated sledgehammer strikes, as in the image at right. *Id.* Aside from complicating frac iron connections, hammer unions have

other disadvantages. *Id.* Each of the dozens of hammer unions between a frac manifold's outlet and the corresponding inlet at a fracturing tree represents a potential point of failure because of the high pressures. *Id.* These connections are often the source of simultaneous leaks. *Id.*

Even properly installed frac iron increases the risk of worksite injuries and leaks. *Id.* Crisscrossing frac iron creates a hazardous "spaghetti plate" at the wellsite. *Id.* This requires the use of tie-downs to decrease vibrations in, and movement of, the frac iron. *Id.* And using multiple, smaller-diameter fluid conduits during high-pressure fracturing operations increases the likelihood of leaks, while also creating bottlenecks in the flow path. *Id.* For these reasons, and those obvious from the picture above, workers have coined the derisive term "fractapus" to describe the jumble of frac iron running to the frac head atop a fracturing tree in a traditional fracturing operation. *Id.*

2. Cameron's single fluid conduit—one and only one fluid pathway

Some inventions in U.S. Patent Nos. 9,915,132 (ECF No. 1-1) (the "'132 Patent") and 10,385,645 (ECF No. 1-2) (the "'645 Patent") (collectively, the "Asserted Patents") seek to solve

the problems explained above by, among other things, simplifying the connections to fracturing trees by enabling the use of a single, larger-diameter fluid conduit instead of multiple pieces of prior art iron, providing one and only one fluid pathway between the fracturing manifold and each fracturing tree.

a. ’132 Patent

The ’132 Patent teaches methods and systems to “accommodate spacing and elevation differences” when connecting fracturing trees. *See, e.g.*, ’132 Patent at Abstract; Ex. A, ¶ 53. In some embodiments, the ’132 Patent discloses a single fluid conduit to the fracturing tree comprising connection blocks 42 connecting lengths of conduit (*e.g.*, pipe sections) together to accommodate for these differences in space and elevation. *See* ’132 Patent at 5:62–6:3.

Asserted Claims 9 and 12 describe such embodiments. Claim 9 requires “a single fluid conduit coupled to the well fracturing tree,” where “the single fluid conduit includes . . . a first connection block positioned at the well fracturing tree” and “a second connection block,” with “one or more pipe sections coupled between the first connection block and the second connection block.” *Id.* Although some dependent claims (*e.g.*, Claim 11) require adding adjustment joints, the embodiment in Claim 9 is broader, and provides for vertical and horizontal adjustments of the fluid conduit by using individual lengths of pipe through the connection blocks. *Id.*; Ex. A, ¶ 54. While Claim 9 requires only a single well fracturing tree, Claim 12 (which depends from Claim 9) describes an embodiment comprising another well fracturing tree—which a POSITA would understand to connect to the system just as the independent claim describes. Ex. A, ¶¶ 53–55.

b. ’645 Patent

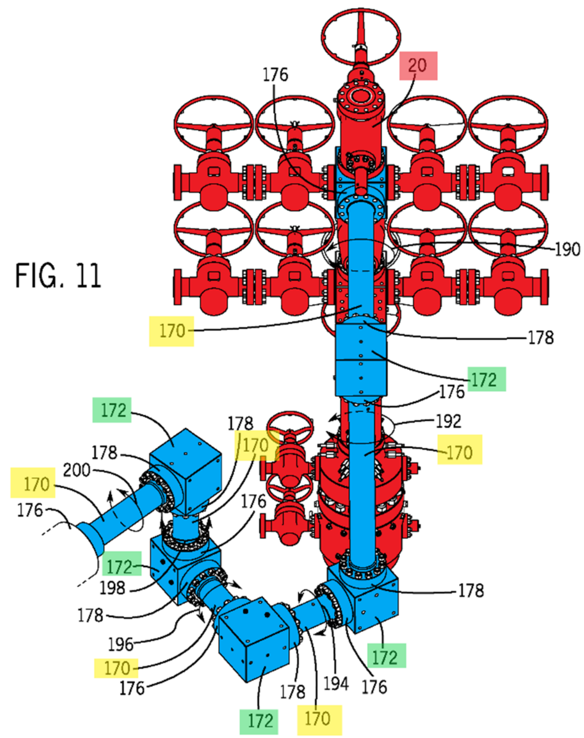
The ’645 Patent similarly teaches, among other things, systems and methods for providing a single fluid pathway between a fracturing manifold and a fracturing tree instead of prior-art frac iron. *See, e.g.*, ’645 Patent at 9:25–28 (“Like some other embodiments described above, the

fracturing system depicted in Fig. 11 uses only a single fluid conduit 26 per fracturing tree 20 rather than using multiple, smaller fluid conduits."); Ex. A, ¶¶ 56–64.

i. Connection blocks and pipe joints

Annotated Figure 11 below reflects one such embodiment. *Id.*; '645 Patent at 8:49–57, 9:9–38. The fluid conduit in this embodiment comprises several pipes 170 (yellow highlighted numbering) that connect to each other through connection blocks 172 (green highlighted numbering). '645 Patent at 8:49–57. Claim 1 requires a fracturing manifold, a plurality of fracturing trees (*e.g.*, element 20 (red)), and a plurality of fluid conduits (*e.g.*, the blue-shaded element in Figure 11). *See id.* at Claim 1.

FIG. 11



The plurality of fluid conduits couples the fracturing manifold to the fracturing trees. *Id.* Any individual fluid conduit to a fracturing tree can comprise one or more rigid fluid components connected in series (as with the six pipes 170 in Figure 11). *Id.* But Claim 1 requires that there is ultimately "one and only one rigid fluid pathway from the fracturing manifold to the fracturing tree," like the shaded blue fluid conduit from Figure 11. *See id.* In other words, Claim 1 excludes solutions like multiple pieces of prior-art frac iron that would provide multiple fluid pathways between the fracturing manifold and the fracturing tree. Ex. A, ¶¶ 57–63.[1]

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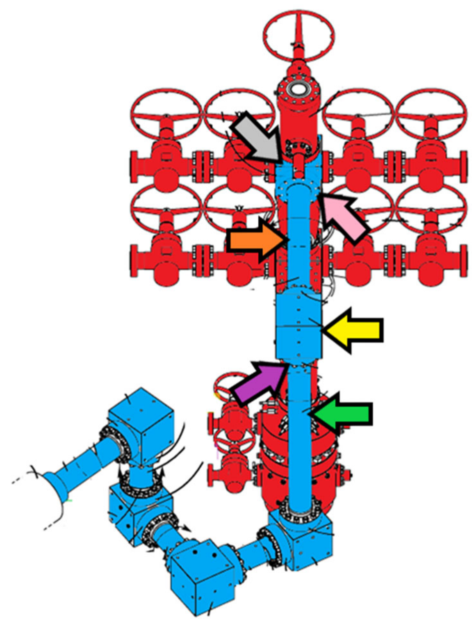
[1] This is also clear from the prosecution history. The Examiner at first rejected Claim 1 for double-patenting over U.S. Patent No. 9,932,800. Ex. N at CMRN000288–000289. The Examiner

Claim 1 further requires that the rigid fluid pathway include pipe joints (*e.g.*, pipes 170 in the Figure 11 embodiment)[2] and connection blocks. '645 Patent at Claim 1. Although some dependent claims (*e.g.*, Claims 5–6) require adjustment joints, Claim 1 does not. *Id.* Claim 1 is broader. It also includes the embodiments where the pipe joints and connection blocks can "be rotated to desired positions before assembling these components together (*e.g.*, via studded connections)" to achieve the desired horizontal and vertical adjustments to connect the outlet of the fracturing manifold to the inlet of the fracturing tree. *Id.* at 8:37–43.



Claim 1 also requires a specific arrangement of the pipes and connection blocks, an example of which the annotated Figure 11 at right highlights.[3] Ex. A, ¶¶ 60–61. For instance, Claim 1 requires "a first pipe [green arrow] that is attached to a first connection block [yellow arrow] via a first flanged connection [purple

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understood the '800 Patent to require that "the fracturing trees are coupled to the fracturing manifold by only one rigid fluid conduit." *Id.* at CMRN000291. After a telephonic interview, the applicant amended Claim 1 in further accordance with the prior-issued '800 Patent to add the "one and only one rigid fluid pathway" limitation to clarify this point. *See* Ex. O at CMRN000322, 000329. The applicant differentiated Claim 1 from the relevant claims in the '800 Patent by amending to require the specific arrangement of pipes and connection blocks in series that appear in the issued claim. *Id.* at CMRN000329. The applicant and Examiner thus understood Claim 1 to exclude embodiments, like those using prior-art frac iron, where there are multiple fluid pathways between the fracturing manifold and the fracturing tree.

[2] As Cameron will explain in more detail below, the ordinary and customary meaning of "pipe joint" in the art is "a length of pipe." *See, e.g.*, Ex. D (defining "joint" as "[a] length of pipe"); Ex. L (defining "joint" as "[a] length of pipe"); Ex. A, ¶¶ 23, 70–75 (confirming these definitions).

[3] Because there are more than two pipe joints and connection blocks in the Figure 11 embodiment, there are other ways to read Claim 1 onto this configuration.

arrow].” ’645 Patent at Claim 1. It further requires “a second pipe [orange arrow] that is in fluid communication with the first pipe and is attached to a second connection block [silver arrow] via a second flanged connection [pink arrow].” *Id.*

ii. Trunk lines and outlet branches

Some embodiments of the ’645 Patent require a shared trunk line and outlet branches.[4] The shared trunk line generally refers to the portion of the fracturing manifold where pressurized fluid enters, and from which fluid flows to the fracturing manifold’s various outlet branches. *See, e.g.*, ’645 Patent at Abstract (“[t]he fracturing manifold can include a trunk line that provides fracturing fluid to multiple outlet branches”), 1:66–2:4 (“In some instances, a fracturing manifold includes a trunk line for providing fracturing fluid to multiple outlet branches of the manifold.”); Ex. A, ¶¶ 62–63; Ex. I (defining “trunkline” as “a main line”); Ex. M (defining “trunk line” as “[f]langed piping that connects the missile to each leg on a frac manifold”).[5]

With that in mind, the outlet branches are extensions from the shared trunk line that, in some embodiments, can bring the manifold’s outlet and valves closer to the well. *See, e.g.*, ’645 Patent at Abstract (“[outlet branches] can include valves for controlling flow of fracturing fluid to wells downstream of the valves”), 1:66–2:4 (“the multiple outlet branches can include valves for controlling flow of fracturing fluid toward wells from the trunk line”); Ex. A, ¶¶ 62–63.

For example, annotated Figure 10 (below) from the ’645 Patent reflects one such configuration. *Id.* In this configuration, the visible portion of fracturing manifold 22’s shared trunk

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[4] Some claims use the term “trunk line,” while others use the term “shared trunk conduit.” Both terms describe the same element. *See* Ex. A, ¶ 62.

[5] The term “missile” refers to the component where the pumps pressurize the fracturing fluid and that then provides the pressurized fracturing fluid to the fracturing manifold. *See* Ex. A, ¶ 62.

line (green) includes conduit 42 and connection blocks 48 and 50. *See* ’645 Patent at 1:66–2:4, 8:26–48. The outlet branches (purple) are the manifold’s extensions from the shared trunk line, which in this embodiment comprise a pair of valves 46 and 44, respectively. *See id.*, Claim 3 (requiring valves in the outlet branches), Claim 4 (requiring “a first outlet branch having two valves connected in series” and “a second outlet branch having two valves connected in series”).

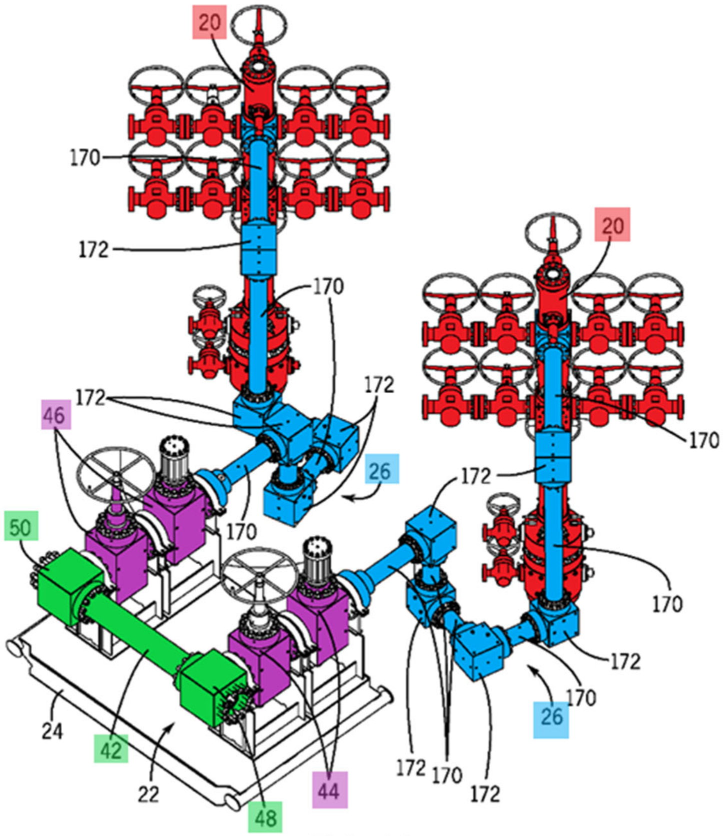

FIG. 10

In this embodiment, fluid connection 26 (blue) between the fracturing manifold and the fracturing tree (red) begins at the outlet of the respective valves 46 and 44. *See* ’645 Patent at 1:66–2:4, 8:26–48. In other embodiments, the outlet branches might not have valves, and the manifold valves might be in different locations. *See id.* at Claim 2 (requiring outlet branches but not requiring they contain valves). The green shared trunk line can extend and include additional outlet branches to service additional wells.

* * * * *

In sum, the Asserted Patents teach (among other things) systems and methods that use a single, rigid, larger-diameter fluid conduit in place of multiple lines of smaller-diameter frac iron. Ex. A, ¶¶ 56–65. Many advantages of this change—like simplifying the setup and eliminating

potential points of failure by providing a single fluid pathway between the fracturing manifold and the fracturing tree—are evident from comparing Cameron's commercial embodiment, MONOLINE™ (below, left), with a prior-art fracturing job using frac iron (below, right). *Id.*

III. LEGAL STANDARDS

A. Claim Construction

Courts must generally give claim terms their plain and ordinary meanings. *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312 (Fed. Cir. 2005) (en banc); *Azure Networks, LLC v. CSR PLC*, 771 F.3d 1336, 1347 (Fed. Cir. 2014) ("There is a heavy presumption that claim terms carry their accustomed meaning in the relevant community at the relevant time.") (vacated on other grounds) (internal quotations omitted). The plain and ordinary meaning of a term is the "meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention." *Philips*, 415 F.3d at 1313.

"Although extrinsic evidence can also be useful, it is 'less significant than the intrinsic record in determining the legally operative meaning of claim language.'" *True Chem. Sols., LLC v. Performance Chem. Co.*, No. MO-18-CV-00078-ADA, at 3 (W.D. Tex. Sept. 25, 2019) (quoting *Phillips*, 415 F.3d at 1317). "Technical dictionaries may be helpful, but they may also provide definitions that are too broad or not indicative of how the term is used in the patent." *Id.* "Expert testimony also may be helpful," but it should be supported and well-reasoned. *Id.*

There are ultimately "'only two exceptions to [the] general rule' that claim terms are construed according to their plain and ordinary meaning." *Id.* (quoting *Thorner v. Sony Computer Entm't Am. LLC*, 669 F.3d 1362, 1365 (Fed. Cir. 2012)). These two exceptions arise "when the patentee (1) acts as his/her own lexicographer or (2) disavows the full scope of the claim term either in the specification or during prosecution." *Id.* "To act as his/her own lexicographer, the patentee must 'clearly set forth a definition of the disputed claim term,' and 'clearly express an intent to define the term.'" *Id.* at 3–4 (quoting *Thorner*, 669 F.3d at 1365). Disavowing claim scope requires "a clear disavowal." *Thorner*, 669 F.3d at 1366. So when "an applicant's statements are amenable to multiple reasonable interpretations, they cannot be deemed clear and unmistakable," and those statements cannot provide a clear disavowal of claim scope. *3M Innovative Props. Co. v. Tredegar Corp.*, 725 F.3d 1315, 1326 (Fed. Cir. 2013).

B. Indefiniteness

Patent claims must particularly point out and distinctly claim the subject matter of the invention. 35 U.S.C. § 112(b). This does not demand absolute precision—claims are indefinite only if "read in light of the specification delineating the patent, and the prosecution history, [they] fail to inform, with reasonable certainty, those skilled in the art about the scope of the invention." *Nautilus, Inc. v. Biosig Instruments, Inc.*, 572 U.S. 898, 901 (2014). As it challenges a patent's validity, a challenger must show the failure of any claim for indefiniteness by clear and convincing evidence. *Sonix Tech. Co., Ltd. v. Publ'ns Int'l, Ltd.*, 844 F.3d 1370, 1377 (Fed. Cir. 2017).

In the end, "indefiniteness is a question of law and in effect part of claim construction." *ePlus, Inc. v. Lawson Software, Inc.*, 700 F.3d 509, 517 (Fed. Cir. 2012). And conclusory assertions of indefiniteness cannot meet the clear and convincing burden. *See, e.g.*, *Whirlpool Corp. v. Ozcan*, No. 2:15-CV-2103-JRG, 2016 WL 7474517, at *3 (E.D. Tex. Dec. 29, 2016) (finding defendant "failed to meet the high burden necessary to establish that the relevant claims

are indefinite" where "[i]nstead of submitting evidence, such as an expert declaration, to demonstrate the understanding of a person of ordinary skill in the art, [defendant] relie[d] entirely on attorney argument based on the patent's intrinsic evidence") (Gilstrap, J.).

IV. CLAIM TERMS

Butch's contends that every claim term but one (pipe joints) is indefinite. These terms, however, have plain and ordinary meanings that a POSITA would easily understand within the context of the claims with reasonable certainty. The discussion above about the technology disclosed in the patents shows this because it explains (and in many cases illustrates) within the context of the claims, and based on the skill and knowledge of a POSITA, many terms that Butch's contends are indefinite. *See, e.g.*, § II(c)(2), *supra* (discussing and/or illustrating "a single fluid conduit," "fracturing trees," "one and only one rigid fluid pathway," "one rigid fluid conduit," "outlet branches," "pipes," "connection blocks," and "studded connections").

That the claims are not indefinite is also apparent from the declaration of Dr. Gary R. Wooley. As his declaration explains, Dr. Wooley has the requisite education, training, and experience of one of ordinary skill in the art. *See* Ex. A at ¶¶ 1–11, 24–26. After reviewing the claims, the specification, and the prosecution history, Dr. Wooley is unequivocal that a POSITA would understand these terms with reasonable certainty. *See id.* at ¶¶ 23, 66–67.

As to Butch's positions, it has not explained why simple terms like "fluid conduit" do not have a plain and ordinary meaning and are not capable of construction with reasonable clarity. But Butch's has informed Cameron that it will not rely on any expert to support its indefiniteness arguments. Courts facing this situation—where one party argues indefiniteness with no expert testimony support, and the other has evidence and expert testimony to support a term's meaning—have rejected indefiniteness. *See Whirlpool Corp.*, 2016 WL 7474517, at *3 (finding defendant "failed to meet the high burden necessary to establish that the relevant claims are indefinite" where

"[i]nstead of submitting evidence, such as an expert declaration, to demonstrate the understanding of a person of ordinary skill in the art, [the defendant] relie[d] entirely on attorney argument based on the patent's intrinsic evidence" because "[t]he Court finds such argument unpersuasive"). That said, because the bases for Butch's indefiniteness contentions are unclear, Cameron will respond to Butch's specific arguments after Butch's reveals them in its opening brief.

For now, Cameron will focus on the only terms for which either party has proposed a construction: "positioned at" from the '132 Patent, and "pipe joints" from the '645 Patent. The Court should adopt Cameron's proposed constructions for both for the reasons explained below.

A. '132 Patent: "positioned at"

Claim 9	
Cameron's Proposed Construction	Butch's Proposed Construction
"attached to or adjacent to"	Indefinite

Claim 9 requires "a first connection block ***positioned at*** the well fracturing tree." '132 Patent at Claim 9 (emphasis added). This claim also requires that "fracturing fluid can be routed . . . to the well fracturing tree through the first connection block." A POSITA would understand this to mean that the second connection block is attached to the fracturing tree (*e.g.*, as part of the stack of valves comprising the fracturing tree), or adjacent to the fracturing tree, to facilitate the flow of fracturing fluid into the wellbore. *See* Ex. A, ¶¶ 68–69.

This understanding fits with dependent Claim 10, which requires the connection block to be "attached to a valve of the well fracturing tree." Butch's is wrong that this term is indefinite. As explained above, based on the claim language and the intrinsic record, a POSITA would understand with reasonable certainty how the first connection block is positioned at the well. *See* Ex. A, ¶¶ 68–69. The Court should therefore find this term not indefinite, and construe it to mean "attached to or adjacent to."

B. ’645 Patent: “pipe joints”

Claim 1	
Cameron’s Proposed Construction	Butch’s Proposed Construction
“lengths of pipe”	“structures for joining pipes”

Claim 1 requires “a plurality of pipe joints and connection blocks coupled to one another,” and describes “the plurality of pipe joints and connection blocks” as including “a first pipe that is attached for a first connection block” and “a second pipe that is . . . attached to a second connection block.” As this shows, the “plurality of pipe joints” (which are described as “coupled to” the connection blocks) include the first and second pipes later described as “attached to” the first and second connection blocks, respectively. *See* Ex. A, ¶¶ 70–75.

The specification supports this understanding of Claim 1 for the reasons that Section II(c)(2)(b)(i), *supra*, illustrates. For instance, Figures 10 and 11 show embodiments where fluid conduit 26 comprises lengths of pipe connected to connection blocks in the manner described in Claim 1. The specification further refers to element 170 alternately in the same paragraph as “pipe joints 170” and “pipes 170.” *See* ’645 Patent at 8:29–43. As shown in the annotated Figures above, such as Figures 10 and 11, element 170 is a length of pipe, not a structure for joining pipes. In short, the intrinsic record supports Cameron’s position that “pipe joints” refers to “lengths of pipe,” and nothing in the intrinsic record suggests that “pipe joints” are distinct from “pipes,” or that “pipe joints” means “structures for joining pipes,” as Butch’s proposes. *See* Ex. A, ¶¶ 71–73.

In any event, Butch’s proposal is particularly inappropriate given the language of Claim 1, as it would require coupling “structures for joining pipes” with connection blocks—which are, as Claim 1 requires, themselves structures for joining pipes. *Id.*, ¶ 71; ’645 Patent at 9:34–38 (“Additionally, although the pipes 170 are shown connected orthogonally to one another via the connection blocks 172 in the present embodiment, other embodiments could include pipes 170

connected to one another at different angles."), Claim 1 ("a first pipe that is attached to a first connection block . . . a second pipe that is . . . attached to a second connection block"), Claim 7 ("the second pipe is also attached to the first connection block"), Claim 8 ("the first pipe and the second pipe are connected orthogonally to one another via the first connection block"), Claims 10–11, Claim 14, Claim 17, Claim 20, Figs. 3, 10–11.

And the intrinsic record's use of "pipe joints" to mean "lengths of pipe" adheres to the ordinary and customary use in the industry. *See* Ex. L (defining "joint" as "[a] length of pipe"); Ex. D (defining "joint" as "[a] length of pipe"); Ex. A, ¶ 74 (concurring with these definitions). Unlike Butch's proposal, which conflates the pipe joints and connection blocks, Cameron's proposal also clarifies the claim language for the jury. *See, e.g.*, '645 Patent at Claim 1 ("a plurality of [lengths of pipe] and connection blocks coupled to one another . . . including: a first pipe that is attached to a first connection block . . . and a second pipe that is . . . attached to a second connection block"). The Court should thus construe "pipe joints" consistent with the intrinsic record, and its ordinary and customary meaning in the industry, to mean "lengths of pipe."

V. CONCLUSION

As the above discussion shows, a POSITA would understand all the identified terms with reasonable certainty. The Court should therefore find all the claims not indefinite; adopt Cameron's proposed constructions for "positioned at" and "pipe joints"; and give the remaining terms their plain and ordinary meanings.

DATED: July 15, 2020

Respectfully submitted,

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CERTIFICATE OF SERVICE

I hereby certify that on the 15th day of July, 2020, I electronically filed the foregoing with the Clerk of the Court using the CM/ECF system which will send notification of such filing to the following:

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